Remarks by the Honorable Sean O'Keefe
NASA Administrator
Marymount University Commencement Address
Constitution Hall
Washington, D.C.
"Pioneering the Future"
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Good afternoon. President Bundschuh (Bund-Shoe) (Dr. James Bundschuh), Chairman Fitzpatrick (Barry Fitzpatrick), thank you so much for your warm welcome.

I appreciate very much your kind invitation to speak to Marymount's very accomplished class of 2004 and for the tremendous honor that's been bestowed on me today. I will cherish this always.

Let us acknowledge at the outset the most important people here today. Would the soon-to-be-graduates please rise and join me in recognizing the people who have really made all this possible – your

parents. Please join me in a round of applause for them.

I know the primary job of a commencement speaker is to be brief and be gone. I also know that all that stands between you and the fulfillment of your achievement is me. Certainly the most that any commencement speaker ever hopes to convey is one or two nuggets you can take away and say, "Well, it was memorable for those points." I'll try not to disappoint on this score.

And so the two points I hope to convey today are about the values of public service and the possibilities we can imagine if we yield to the human desire to explore.

Now I'm of Irish heritage, as you might have figured, and as some of you know, the Irish have a saying that you have to draw a line in life…on one side of it you put the past…and on the other, the

future. For some people, the hard part is deciding which part of the line you want to live on…Well today, despite the renown Irish tendency to dwell on the past…I will focus on the future…the future you will help to create.

As you might expect, at NASA we believe President Bush's vision to extend civilization's horizons to the surfaces of planets beyond our own will be a significant part of that future.

Indeed, I trust that some of you will follow in the footsteps of Angela Phillips Diaz, a distinguished 1984 Marymount graduate, who in addition of all her great volunteer work for the Marymount Alumni Association, is currently doing a fantastic job for NASA working with members of Congress on our new space exploration agenda.

Angela is our Deputy Assistant Administrator for Legislative Affairs. In previous work for NASA she

was our point person for NASA's relations with Russia and was the lead negotiator for agreements with Canada, Europe, Japan, and Russia for the International Space Station Crew Code of Conduct. She also served four years as the Executive Secretary for the National Science and Technology Council and the President's Committee of Advisors on Science and Technology at the White House Office of Science and Technology Policy.

So you see if you combine an excellent Marymount education with the talent and dedication that Angela demonstrates every day, you can go very far indeed.

There are, of course, many other venues that will enable you to help create a positive future in the century that is just beginning.

One of those is through service to others, which has always been a theme of this outstanding institution.

President Bundschuh (Bund-Shoe) has proudly told me about the Marymount student body's commitment to public service.

I'm very impressed that through the Campus Ministry's Spirit of Service volunteer organization, nearly 800 Marymount students shared their time and talents with the wider community this academic year. On a weekly basis, I'm told Marymount students tutored students at Campbell Elementary School in Arlington, served as mentors for incarcerated youth in the Northern Virginia Juvenile Dentention Home, and helped with recreational activities at the Sunrise Assisted Living Facility in Arlington.

Marymount students also used their spring break time to help renovate homes for needy families in Mt.

Pleasant, South Carolina. That's a record you all can be very proud of and I salute all of you who have taken part in community service activities.

I certainly hope you build on this foundation of service. In this regard, the example of your distinguished honorary degree recipients, Sargent and Eunice Kennedy Shriver, is most instructive.

When he was inaugurated 43 years ago, Eunice's brother John F. Kennedy began his term of office with a stirring call for Americans to "Ask not what your country can do for you; ask what you can do for your country."

In a short while idealistic young college graduates were lining up to join a new organization called the Peace Corps, anxious as President Kennedy said, "to sacrifice their energies and time and toil to the cause of world peace and human progress."

The Peace Corps had in its first director, as fine a public servant as our country has ever known in Sargent Shriver. The honor you have bestowed upon him today is a fitting recognition of his many contributions to our country.

Today our vibrant Peace Corps is a great American success story. And I have a bit of news to share with the Shrivers and all of you. On Thursday, NASA announced our new class of astronauts, 11 remarkable men and women.

Among NASA's Class of 2004 are Educator Astronauts, the folks who will perform astronaut duties and do so from the unique perspective of professional educators to help inspire millions of school children throughout America with creative lessons from space about the wonders of science.

We are delighted that one of our Educator Astronauts is Joe Acaba, a middle school math and

science teacher from Dunnellon, Florida, and Peace Corps veteran. Joe, who served in the Dominican Republic is the first person to be a part of both the Peace Corps and NASA's astronaut corps. I can think of no greater tribute to the legacy of the Kennedy family that the Peace Corps and the exploration of space are now linked in this special way.

Of course the Special Olympics provides another great opportunity for public service. We tally the success of this wonderful competition founded by Eunice Shriver not by the number of medals won by the participants, but by the number of smiles and hugs shared by participants and spectators alike.

As President Bush said at a White House reception in honor of the program, "Special Olympics is an example of America at its best, sharing with the entire world a spirit of joy and kindness."

As all of you prepare to begin your careers, I hope that whatever you do, you will also continue to find time for volunteer activities.

This is an extraordinary time in our country's history. Americans have demonstrated, through countless acts of kindness, that our country's greatest strength lies in the hearts and souls of our citizens. As new college graduates, you now have the opportunity to share your time and talents with those who need it most.

Indeed, the President has asked all Americans to dedicate a part of our careers in service to others.

President Bush created the USA Freedom Corps to help Americans answer his "call to service" by providing meaningful opportunities to serve both at home and abroad.

Along your career development path, I encourage you to give the Freedom Corps serious

consideration. Service like this will provide you the opportunity to help countless others and by doing so enrich your own lives.

Let me now turn to the world and world's beyond you will help shape in the years ahead. In the first half of the 21st century, as you pursue your careers, the graduates of Marymount will have the opportunity to make America and the 70 countries represented in your student body better places for all their citizens.

Your generation will help promote democracy and human rights throughout the globe, fight new and deadly diseases, enhance environmental quality, improve our schools, advance economic and technological progress and as the President has proposed, participate in a renewed spirit of discovery.

I'm excited that as the second century of flight unfolds, those of you who will pursue science and

technology careers will help carry the torch of exploration to heights unimagined and into frontiers unknown.

We have indeed accomplished a great deal in NASA's 45 years, but are only just now are at the beginning of this age of space exploration. I'm reminded of a remarkable piece that David McCullough wrote just a few years ago -- a historical biography of John Adams, the second President, in which Adams lamented that the pride of the American fleet, the USS Constellation lay at anchor in Boston Harbor for days and days at a time because the weather wouldn't permit it to sail. We are in the equivalency of that time. Even though the Constellation was, at that period, the pride of the American fleet -- the force projection that the US aspired to forever -- it couldn't get underway. It was limited by the function of that which has always

throughout the course of our planet's history either enabled or deterred new advancement. And that is the weather. We are in the same mode right now with space exploration. We are in the "Age of Sail" in space exploration. Conditions must be perfectly right for us to proceed. And we aspire to the "Age of Steam."

As the men and women of NASA implement our bold new space exploration vision, we will work with our international partners to extend the reach of human civilization and the spirit of freedom ever outward, using a meticulous stepping stone approach.

Now many of you among this class of 2004 are probably among the 125 million visitors to the NASA website over the course of the last four months, accounting as many of you probably did for the 10 billion hits that we have had to our website in that span of time.

So many will already recognize these points, and in hopes of refreshing the memory of those who have seen them let me recount our stepping stones.

First, we will return the Space Shuttles safely to flight and in so doing honor the legacy of our remarkable Columbia astronauts, who were lost so tragically a year ago. Going forward, we recognize that we must show great diligence to reduce the risk of exploration to the lowest level humanly possible.

Second, we will complete the International Space Station and use this research laboratory that orbits 250 miles over our heads--and comes around every 90 minutes--to conquer the effects of space travel on human beings for long-term endurance flights.

At this very moment U.S. astronaut Michael Fincke and Russian cosmonaut Gannady Padalka are carrying on this research on their Expedition Nine mission as we speak.

Third, we will send robotic probes and then human explorers on to the Moon to demonstrate technologies needed for Mars and beyond.

And finally, through an effort aptly named Project Constellation, recalling John Adams lament of 200 years ago, we will develop those capabilities that will allow humans to explore the far reaches of the solar system.

This approach will allow us to learn from our experiences and to incorporate new technological developments along the way.

And as the ongoing missions of the Mars Exploration Rovers Spirit and Opportunity demonstrate when you reach out to new places in the solar system and ask profound questions, you may very well receive profound answers.

The discovery by the Opportunity Rover of evidence that Mars once had large amounts of surface water is a profound finding indeed.

And what that tells us is that the climate and atmosphere of this planet was once profoundly different. Understanding why it changed may well provide a whole new perspective on our place in this solar system, in the galaxy and indeed in the broader universe.

Now just think about the other compelling scientific discoveries that the continued exploration of space will bring about in the coming decades.

When the history of your time is written, we can well imagine that your generation of explorers will have sought life's abodes in our corner of the universe.

You will be able to look up to the stars that once guided the sailing vessels of yore, remembering the

Constellation that could not get underway, and map continents on dozens of their planets, and in doing so help improve our own human condition here on Earth and along the way.

The pursuit of the President's vision will spur technological developments that will lead to new products and services and tangibly improve the lives of people throughout the world.

Just as the Apollo program led to important advances in computing and electronics when I was growing up, the potential spinoff benefits from the Constellation exploration program will be just as considerable.

Since the Apollo era, MRI's, cataract detection, and heart pumps are all examples of NASA technologies used to advance our exploration goals being applied to productive use in society.

We believe the technology development necessary to execute and implement our new space exploration objectives will accelerate advances in robotics, autonomous and fault tolerant systems, human-machine interface, life support systems and novel applications of nanotechnology and microdevices.

Those of you who engaged in laboratory work on these cutting-edge topics will be in a great position to be the movers and shakers of our nation's technological future.

We're optimistic that our space program boosts the opportunities we will have to become a smarter, safer, healthier and more intelligent world on a scale never seen before in the history of the planet, at a pace hardly thought possible.

But in sharp contrast to the Apollo era, for which the price of being second was catastrophic, this is not

a race. Instead it will be a journey, propelled by a renewed spirit of exploration and discovery.

The first explorers to set foot on Mars may well indeed be sitting in this audience today. You will have the means to make this vision come to pass, because as the President has observed, "Exploration is not an option we choose. It is a desire written in the human heart."

Friends, forty-one years ago in his final public speech, Eunice's brother John F. Kennedy, spoke about his passion for space exploration at the dedication of San Antonio's Aerospace Medical Center.

This speech is less well known than President Kennedy's memorable address that committed our country to sending astronauts to the Moon, but it is well worth recalling.

Addressing the subject of our infant space program, the President who opened the door to our first great adventure beyond Earth, relayed a story told by the Irish writer Frank O'Connor.

I think this story defines what our space exploration vision and your future is all about. "O'Connor wrote how as a boy he and his friends would make their way across the countryside," said President Kennedy. "When they came to an orchard wall that seemed to high and too doubtful to try and too difficult to permit their voyage to continue, they took off their hats and tossed them over the wall—and then they had no choice but to follow them."

President Kennedy concluded, "This Nation has tossed its cap over the wall of space, and we have no choice but to follow it. Whatever the difficulties, they will be overcome. Whatever the hazards, they must be guarded against. With the help of all those

who labor in the space endeavor, with the help and support of all Americans, we will climb this wall with safety and with speed—and we shall then explore the wonders on the other side."

And that's exactly what our space program is doing right now and will do in the decades ahead.

In a few moments all of you will have the opportunity to toss your graduation caps in the air. Like Frank O'Connor and his friends, I hope you toss your caps up as high as possible over the wall separating you from your scholastic life and your life to come, and that in whatever direction you set out in, you have a great adventure exploring the wonders on the other side.

In closing, I wish to congratulate all of you on your achievements up to this special point. I congratulate your faculty members who have guided you to this day, as well as your supportive family

members, and I wish all of you the very best in your pursuit of a life that matters, continuing to stand as you have for excellence and service to causes greater than your individual self-interest.

Thank you and Godspeed to the graduates of the class of 2004.